

**OPINIONS AND DECLARATIONS
RENDERED BY THE INTER-
NATIONAL COMMISSION ON
ZOOLOGICAL NOMENCLATURE**

Edited by

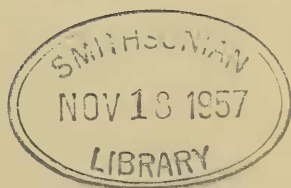
FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the Commission

VOLUME 17. Part 3. Pp. 15—40

OPINION 482

Rejection of a proposal for the suppression under the
Plenary Powers of the generic name *Caenisites* Buckman,
1925 (Class Cephalopoda, Order Ammonoidea)



LONDON :

Printed by Order of the International Trust for
Zoological Nomenclature
and

Sold on behalf of the International Commission on Zoological
Nomenclature by the International Trust at its Publications Office
41, Queen's Gate, London, S.W.7
1957

Price Seventeen Shillings and Sixpence

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 482

A. The Officers of the Commission

Honorary Life President : Dr. Karl JORDAN (*British Museum (Natural History), Zoological Museum, Tring, Herts., England*)

President : Professor James Chester BRADLEY (*Cornell University, Ithaca, N.Y., U.S.A.*)
(12th August 1953)

Vice-President : Senhor Dr. Afranio do AMARAL (*Sao Paulo, Brazil*) (12th August 1953)

Secretary : Mr. Francis HEMMING (*London, England*) (27th July 1948)

B. The Members of the Commission

(*Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology*)

Professor H. BOSCHMA (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*)
(1st January 1947)

Senor Dr. Angel CABRERA (*La Plata, Argentina*) (27th July 1948)

Mr. Francis HEMMING (*London, England*) (27th July 1948) (*Secretary*)

Dr. Henning LEMCHE (*Universitetets Zoologiske Museum, Copenhagen, Denmark*) (27th July 1948)

Professor Teiso ESAKI (*Kyushu University, Fukuoka, Japan*) (17th April 1950)

Professor Pierre BONNET (*Université de Toulouse, France*) (9th June 1950)

Mr. Norman Denbigh RILEY (*British Museum (Natural History), London*) (9th June 1950)

Professor Tadeusz JACZEWSKI (*Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland*) (15th June 1950)

Professor Robert MERTENS (*Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a.M., Germany*) (5th July 1950)

Professor Erich Martin HERING (*Zoologisches Museum der Humboldt-Universität zu Berlin, Germany*) (5th July 1950)

Senhor Dr. Afranio do AMARAL (*S. Paulo, Brazil*) (12th August 1953) (*Vice-President*)

Professor J. R. DYMOND (*University of Toronto, Toronto, Canada*) (12th August 1953)

Professor J. Chester BRADLEY (*Cornell University, Ithaca, N.Y., U.S.A.*) (12th August 1953) (*President*)

Professor Harold E. VOKES (*University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A.*) (12th August 1953)

Professor Béla HANKÓ (*Mezőgazdasági Múzeum, Budapest, Hungary*) (12th August 1953)

Dr. Norman R. STOLL (*Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.*) (12th August 1953)

Mr. P. C. SYLVESTER-BRADLEY (*Sheffield University, Sheffield, England*) (12th August 1953)

Dr. L. B. HOLTHUIS (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*) (12th August 1953)

Dr. K. H. L. KEY (*Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia*) (15th October 1954)

Dr. Alden H. MILLER (*Museum of Vertebrate Zoology, University of California, U.S.A.*) (29th October 1954)

Doc. Dr. Ferdinand PRANTL (*Národní Museum V Praze, Prague, Czechoslovakia*) (30th October 1954)

Professor Dr. Wilhelm KÜHNELT (*Zoologisches Institut der Universität, Vienna, Austria*) (6th November 1954)

Professor F. S. BODENHEIMER (*The Hebrew University, Jerusalem, Israel*) (11th November 1954)

Professor Ernst MAYR (*Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.*) (4th December 1954)

Professor Enrico TORTONESI (*Museo di Storia Naturale "G. Doria", Genova, Italy*) (16th December 1954)

OPINION 482

REJECTION OF A PROPOSAL FOR THE SUPPRESSION UNDER THE PLENARY POWERS OF THE GENERIC NAME "CAENISITES" BUCKMAN, 1925 (CLASS CEPHALOPODA, ORDER AMMONOIDEA)

RULING :—(1) The request for the suppression under the Plenary Powers of the generic name *Caenisites* Buckman, 1925 (Class Cephalopoda, Order Ammonoidea) is hereby rejected.

(2) The under-mentioned generic names are hereby placed on the *Official List of Generic Names in Zoology* with the Name Numbers severally specified below :—

(a) *Caenisites* Buckman, 1925 (gender : masculine) (type species, by monotypy : *Caenisites caeneus* Buckman, 1925) (Name No. 1220) ;

(b) *Euasteroceras* Donovan, 1953 (gender : neuter) (type species, by original designation : *Ammonites turneri* Sowerby (J. de C.), 1824) (for use by those specialists who consider on taxonomic grounds that the type species of the genus so named is generically distinct from the type species of the genus *Caenisites* Buckman, 1925) (Name No. 1221).

(3) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below :—

(a) *caeneus* Buckman, 1925, as published in the combination *Caenisites caeneus* (specific name of type species of *Caenisites* Buckman, 1925) (Name No. 1383) ;

- (b) *turneri* Sowerby (J. de C.), 1824, as published in the combination *Ammonites turneri* (specific name of type species of *Euasteroceras* Donovan, 1953) (Name No. 1384).

I. THE STATEMENT OF THE CASE

On 15th November 1952, Dr. W. J. Arkell (*Sedgewick Museum, Cambridge University*) and Dr. D. T. Donovan (*Bristol University*) submitted jointly to the International Commission on Zoological Nomenclature an application asking for the suppression under the Plenary Powers of the generic name *Caenisites* Buckman, 1925 (Class Cephalopoda, Order Ammonoidea), a name given to a genus regarded as having been founded upon a monstrosity. The application so submitted could not immediately be dealt with because the applicants desired to make reference in it to a generic name (*Euasteroceras*) which was then awaiting publication in a paper by one of the applicants (Donovan) in the *Proceedings of the Geological Society of London*. The generic name referred to above was published in 1953, thus making it possible for the applicants to complete their application in regard to the generic name *Caenisites* Buckman. The application so submitted was as follows :—

**Proposed use of the Plenary Powers to suppress the generic name
“*Caenisites*” Buckman, 1925, founded upon a monstrosity (Class
Cephalopoda, Order Ammonoidea)**

By W. J. ARKELL, M.A., D.Sc., F.R.S.
(*Sedgewick Museum, Cambridge University, Cambridge*)

and

D. T. DONOVAN, Ph.D.
(*Bristol University, Department of Geology, Bristol*)

Among scores of Jurassic ammonite genera founded by S. S. Buckman between 1920 and 1930 on single specimens was *Caenisites*

caeneus, " Genotype, Holotype ", from the Lower Lias of Cleve, Cheltenham (Buckman, 1925 : pl. DLXXII). Buckman remarked " keel ends suddenly at 68 mm. (fig. 2a) ". This is evidently due to an injury during life, and, the type specimen remained in oblivion for more than twenty years.

2. There exists in the Lower Lias of England and many European countries, as well as of other continents, a well-known and well-characterised genus of ammonites centred around *Ammonites turneri* J. de C. Sowerby (1824 : 75, pl. 452) and often known as " the *turneri* group ". This group was assigned to the genus *Arietites* Waagen, 1869, by Thomas Wright in his " Monograph of the Lias Ammonites of the British Islands " (1878—1886 : 292, pl. xii), and *A. turneri* was cited as type species of *Arietites* by Buckman (1898 : 452) and refigured by him in 1921 (: pl. CCXXI, figs. A & B) under the generic name *Arietites*.

3. As pointed out by Spath (1946), however, the type species of *Arietites* is *Ammonites bucklandi* Sowerby by monotypy ; and an application has been made to the International Commission on Zoological Nomenclature to place *Arietites* and its type species *A. bucklandi* on the *Official List of Generic and Specific Names in Zoology* respectively (Arkell, 1951 : 202, para. 19)¹.

4. The *turneri* group is now considered generically distinct and therefore requires a new generic name. Spath (1946) stated that *Caenisites* Buckman, 1925, was available for this purpose, because in his opinion the inner whorls of *C. caeneus* belong to a species of this group.

5. In the forthcoming *Treatise on Invertebrate Paleontology* it is intended to reproduce the type figures of all type species of genera. To reproduce the figures of the pathological monstrosity on which *Caenisites* is based as representative of the *turneri* group would be misleading in the extreme. For apart from the fact that the greater part of the outer and visible whorl is keelless, whereas the *turneri* group has three ventral keels, the coiling of the whole ammonite is more evolute, with the whorl enlarging much more slowly even long before the point at which the injury occurred, than in any typical

¹ The application here referred to by Dr. Arkell has now been approved by the International Commission on Zoological Nomenclature and the decision so taken has been embodied in *Opinion* 305 (1954, *Ops. Decls. int. Comm. zool. Nomencl.* 8 : 297—312).

species of the *turneri* group. It will always be open to question whether *Caenisites caeneus* is a member of the *turneri* group.

6. In our opinion such an important group of ammonites as the *turneri* group should have a generic name free from all subjective elements, and Donovan has accordingly proposed the new generic name *Euasteroceras*, with *Ammonites turneri* J. de C. Sowerby as type species.* (Sowerby's upper figure designated lectotype by Buckman, 1898 : 453 and refigured Wright 1878-86, pl. XII, fig. 4.) Unless *Caenisites* is suppressed, however, it will always be possible for some authors to use *Caenisites* for the same group on the ground that an eminent specialist has declared his opinion that *C. caeneus* Buckman is congeneric.

7. We are informed by Mr. Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, that at its meeting at Copenhagen the Fourteenth International Congress of Zoology decided against the inclusion in the *Règles* of a provision invalidating a generic name given to a nominal genus, the type species of which is, in the opinion of later workers, a monstrosity, being of the opinion that such a provision would involve the introduction into the *Règles* of an undesirable subjective element and that, where cases of this kind were encountered, they could be more appropriately dealt with individually under the Commission's Plenary Powers². The present is, in our view, pre-eminently a case which calls for action under the foregoing procedure, and we accordingly recommend the International Commission on Zoological Nomenclature :—

- (1) to use its Plenary Powers to suppress the generic name *Caenisites* Buckman, 1925, for the purposes of the Law of Priority but not for those of the Law of Homonymy ;
- (2) to place the generic name *Euasteroceras* Donovan, 1953 (type species, by original designation : *Ammonites turneri* Sowerby, 1824) (gender of generic name : neuter) on the *Official List of Generic Names in Zoology* ;
- (3) to place the specific name *turneri* Sowerby (J. de C.), 1824 (as published in the binomen *Ammonites turneri*) on the *Official List of Specific Names in Zoology* ;

* Donovan, 1953, *Proc. geol. Soc. Lond.* No. 1503 : xiii—xiv.

² For the decision here referred to see 1953 (*Copenhagen Decisions zool. Nomencl.* : 63, Decision 113).

- (4) to place the generic name *Caenisites* Buckman, 1925, as proposed, under (1) above, to be suppressed under the Plenary Powers, on the *Official Index of Rejected and Invalid Generic Names in Zoology*.

References

- Arkell, W. J., 1951, *Bull. zool. Nomencl.* 2 (Parts 6/8) : 202
- Buckman, S. S., 1898. *Quart. J. geol. Soc. Lond.* 54 : 452—3
- , 1921. *Type Ammonites* 3 : pl. CCXXI, figs. A, B.
- , 1925. *ibid.* 5 : pl. DLXXII
- Sowerby, J. de C., 1824. *Mineral Conchology* 5 : 75
- Spath, L. F., 1946. *Ann. Mag. nat. Hist.* (11) 12 : 490
- Wright, T., 1878—86. *Monograph on the Lias Ammonites of the British Islands*, Palaeont. Soc.

II. THE SUBSEQUENT HISTORY OF THE CASE

2. Registration of the present application : Upon the receipt in 1952 of the preliminary application by Dr. Arkell and Dr. Donovan, the question of the suppression under the Plenary Powers of the generic name *Caenisites* Buckman, 1925, was allotted the Registered Number Z.N.(S.) 798.

3. Publication of the present application : The present application was sent to the printer on 8th December 1953 and was published on 26th February 1954 in Part 12 of Volume 6 of the *Bulletin of Zoological Nomenclature* (Arkell & Donovan, 1954, *Bull. zool. Nomencl.* 6 : 364—366).

4. Issue of Public Notices : Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* 4 : 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 26th February 1954 (a) in Part 12 of Volume 6 of the *Bulletin of Zoological Nomenclature* (the Part in which the application by Dr. Arkell and Dr. Donovan was published) and (b) to the other prescribed serial publications. In addition such Notice was given to four general zoological serial publications and to three palaeontological serials in Europe and America.

5. Comments received : The publication of the present application and the issue of Public Notices in regard thereto elicited comments from five specialists, of whom three (Germany, one ; United Kingdom, one ; United States, one) supported the application, while the remaining two (both United Kingdom specialists) expressed opposition thereto. At a later stage one of the specialists (Sylvester-Bradley) who had previously expressed his support for the action recommended in this case changed his standpoint and submitted a note of opposition thereto. The communications so submitted are reproduced in the immediately following paragraphs.

6. Support received from Helmut Hölder (Institut und Museum für Geologie und Paläontologie der Universität Tübingen, Germany) : On 30th September 1954, Dr. Helmut Hölder (*Institut und Museum für Geologie und Paläontologie der Universität Tübingen, Germany*) addressed the following letter of support for the present application to the Office of the Commission (Hölder, 1954, *Bull. zool. Nomencl.* 9 : 349) :—

Ich schliesse mich dem von W. J. Arkell und D. T. Donovan eingereichten Vorschlag zur Unterdrückung des Gattungs-Namens *Caenisites* Buckman, 1925 an. Denn der Genotypus der Gattung ist auf ein monströses Exemplar (Specie-Typus von *Caenisites caeneus* Buckman) gegründet, das nicht eindeutig bestimmt werden kann. Dieser Sachverhalt widerspricht daher der beabsichtigten Kontinuität der zoologischen Nomenklatur.

7. Support received from Otto H. Haas (The American Museum of Natural History, New York, U.S.A.) : On 18th October 1954, Dr. Otto H. Haas (*The American Museum of Natural History, New York, U.S.A.*) addressed the following letter of support to the Office of the Commission (Haas, 1954, *Bull. zool. Nomencl.* **9** : 350) :—

This is to express my full support of the proposal by Drs. Arkell and Donovan to suppress the generic name *Caenisites* Buckman, 1925.

8. Comments received from P. C. Sylvester-Bradley (University of Sheffield, England) : As explained in paragraph 5 above, two communications in regard to the present case were received from Mr. P. C. Sylvester-Bradley (*University of Sheffield, England*). In the first of these communications, which was received in the Office of the Commission on 30th September 1954, Mr. Sylvester-Bradley indicated his support for the application submitted in this case. In the second communication, which was dated 23rd March 1955, Mr. Sylvester-Bradley withdrew his support for this case and stated that for the reasons there given he was now opposed to it. The communications so received were as follows :—

(a) **Statement in support of the present application
received from P. C. Sylvester-Bradley
on 30th September 1954**

(Sylvester-Bradley, 1954, *Bull. zool. Nomencl.* **9** : 349)

I wish to support the recommendation of Arkell and Donovan (1954, *Bull. zool. Nomencl.* **6** : 364—366) that the Commission should suppress the name *Caenisites* Buckman, 1925. This name was never used since the date of its proposal until its resurrection in 1946, and has not even since then passed into general usage. No confusion can therefore follow its suppression.

The name *Euasterocerus* Donovan, 1953, which by some is considered a subjective synonym of *Caenisites*, is typified by a well-known species

characteristic of a group of importance to both Jurassic stratigraphy and palaeontology. Previously these species had been known by the now inadmissible name *Arietites*. Specialists disagree as to the synonymy of *Euasteroceras* and *Caenisites* and agreement can never be reached since the type species of *Caenisites* is known by only the holotype, which all agree to be a monstrosity. The existence of the two names is, therefore, a danger to both stability and universal usage, for stratigraphers who are not ammonite specialists are at a loss which name to use. The suppression of the name *Caenisites* is, therefore, in full accord with the general directive given at Copenhagen for the use of the Commission's Plenary Powers (*Copenhagen Decisions zool. Nomencl.* : 23).

**(b) Statement dated 23rd March 1955 received from
P. C. Sylvester-Bradley withdrawing the
support for the present application
given in the statement received in
the Office of the Commission
on 30th September 1954**

The crucial point which the Commission will need to determine in the disagreement between Spath (1954, *Bull. zool. Nomencl.* 9 : 346—348) on the one hand, and Arkell and Donovan (*Bull. zool. Nomencl.* 6 : 364—366) on the other is whether it is the malformation of the type specimen of the ammonite *Caenisites caeneus* that prevents its specific recognition. Spath (*op. cit.* : 347) identifies the specimen as a member of the species *Amm. plotti* Reynès. He bases his identification on the fact that the specimen in dispute is quite normal up to a diameter of 68 mm., the malformation only affecting the last half-whorl of the fossil. The type-specimen is therefore as good a guide to specific recognition as would be a normal undeformed specimen of 68 mm. diameter. Donovan (1953, *Proc. geol. Soc. Lond.*, No. 1503 : xiii) disagrees with Spath in that he believes that the specimen does not "correspond exactly" with *Amm. plotti* Reynès, but this disagreement is no more than might be expected to exist between any two specialists, and does not seem to be conditioned in any way by the fact that the last half-whorl of the specimen is deformed.

2. That specialists should disagree may often embarrass the non-specialist, but the assessment of taxonomic disputes can form no part of the task of the International Commission. I therefore wish to withdraw my support of Arkell and Donovan's proposal (1954, *Bull. zool. Nomencl.* 9 : 349 in favour of Spath's counter proposal (*op. cit.*).

9. **Objection received from L. F. Spath (British Museum (Natural History), London)** : On 22nd July 1954, Dr. L. F. Spath (*British Museum (Natural History), London*) communicated the following paper to the Office of the Commission in which he expressed his objections to the present case (Spath, 1954, *Bull. zool. Nomencl.* 9 : 346—348) :—

1. The proposal by Dr. Arkell and Dr. Donovan that the Plenary Powers be used to suppress the generic name *Caenisites* S. S. Buckman, 1925 (see *Bull. zool. Nomencl.*, 6 : 364) was made principally on the grounds that the single specimen on which the genus was based is a pathological monstrosity. Objection was made at the same time to the present author's usage of the name *Caenisites* for the group of ammonite species that includes *Ammonites turneri* J. de C. Sowerby (1824 : 75, pl. 452, upper figure). This proposal is opposed on the grounds stated below.

2. While it is true that the unique holotype of the type species of the non-typical nominal genus *Caenisites*, *C. caeneus* Buckman (1925 : pl. DLXXII) is a pathological monstrosity, the abnormality affects only the last half-whorl of the specimen, from 68 to 85 mm. diameter. The remainder of the shell is perfectly normal and shows the characters of the species-group that includes *Amm. turneri* J. de C. Sowerby, *Amm. brooki* J. Sowerby (1818 : 203, pl. 190) and *Amm. plotti* Reynès (1879 : pl. 36, figs. 9—16) among others. The original figures of *C. caeneus* show these characters not only in lateral view but also in ventral view before the beginning of the deformed part of the shell. So long as the species-group in question is regarded as homogeneous, it is not seriously open to question whether *C. caeneus* is a member of it or not.

3. It is a matter of observation that deformed specimens are of common occurrence in this group. One was figured as *Arietites turgescens* by Buckman (1918 : pl. 29, figs. 2a, b) ; another, now considered to be a malformed *Amm. plotti* Reynès, was referred to by me as *Arietites* sp. nov. (1923 : 76). The generic affinities of these and other deformed specimens are not obscured by their malformations.

4. Dr. Donovan (1953 : xiii), in proposing the generic name *Euasteroceras* for *Amm. turneri* J. de C. Sowerby, states that *Caenisites caeneus* does not correspond exactly with *Amm. plotti*, referring to my opinion (1946 : 496) that the former was a malformed specimen of the latter. Whatever the words "correspond exactly" may have been intended to mean (very few individuals of any ammonite species

ever correspond *exactly* with each other), he has given no taxonomic reasons to justify the generic separation of *Euasteroceras* from *Caenisites*. He is wrong in stating that degeneration of ornament does not occur in the *turneri*-group. In large examples degeneration similar in type to that known in *Asteroceras* can be seen.

5. On a point of detail, the lectotype of *Amm. turneri* was not, as stated by Dr. Donovan, first designated by Buckman (1898 : 453), but by Oppel (1856 : 82).

6. The intention announced by Dr. Arkell and Dr. Donovan of reproducing the original figures of all type species of all ammonite genera in the forthcoming *Treatise of Invertebrate Paleontology* is quite irrelevant to the nomenclatorial point under discussion. Special pleading of this sort cannot help the Commission to appreciate the essentials of the case. Many genera of ammonites are based on far less satisfactory figures than is *Caenisites*, *Euasteroceras* among them.

7. Many generic names may have been proposed in the mistaken belief that a pathological deformity was a normal morphological character, but most of these cases are so obvious that the subjective element in their interpretation is very small. Moreover, few of such names are involved in situations such as the present where it is generally agreed that a new generic name is needed (for taxonomic purposes) for the species-group to which the pathological specimen belongs. In the writer's opinion, Dr. Arkell and Dr. Donovan are grossly exaggerating the extent of the subjective element in this case. It is claimed that the holotype of *Caenisites caeneus* shows all the characters needed for its generic assignation and that to claim that it is doubtful whether it is a member of the *turneri-plotti* group shows that the authors of the proposal that the generic name *Caenisites* be suppressed have inadequate experience of the many transitional forms in this group.

8. In so far as there is usage of a generic name for the species-group in question, that usage is in favour of maintaining the generic name *Caenisites*. The authors of the proposal to suppress that name have not shown any clear-cut necessity for doing so in the terms of *Opinion* 93. They are, on the other hand, relying on that subjective element in the case which was stressed in the Copenhagen decision to reject Dr. Arkell's application for the inclusion in the *Règles* of a provision invalidating a generic name given to a nominal genus, the type species of which is, in the opinion of later workers, a monstrosity.

9. In the writer's opinion, the nominal genus *Euasteroceras* Donovan, 1953 is a subjective synonym of *Caenisites* Buckman, 1925. It is,

therefore, requested that the International Commission on Zoological Nomenclature :—

- (1) reject the proposal to use their Plenary Powers to suppress the generic name *Caenisites* Buckman, 1925 ;
- (2) reject the proposal to use their Plenary Powers to suppress the specific name *caeneus* Buckman, 1925, as published in the binomen *Caenisites caeneus* ;
- (3) place the generic name *Caenisites* Buckman, 1925 (type species, by monotypy : *Caenisites caeneus* Buckman) (gender of generic name : masculine) on the *Official List of Generic Names in Zoology* ;
- (4) place the specific name *caeneus* Buckman, 1925, as published in the binomen *Caenisites caeneus* on the *Official List of Specific Names in Zoology* ;
- (5) place the generic name *Euasteroceras* Donovan, 1953 (type species, by original designation, *Ammonites turneri* J. de C. Sowerby, 1824) (gender of generic name : neuter) on the *Official Index of Rejected and Invalid Generic Names in Zoology*.

References

- Arkell, W. J., and Donovan, D. T., 1954. *Bull. zool. Nomencl.* **6** : 364
- Buckman, S. S., 1898. *Quart. J. geol. Soc. Lond.* **54** : 442—62
- 1918. *ibidem*, **73** : 257—327, pls. xxvi—xxxi
- 1925. *Type Ammonites* **5**, Part LII. London
- Donovan, D. T., 1953. *Proc. geol. Soc. Lond.* No. **1503** : xiii—xiv
- Oppel, A., 1856 (—58). *Die Juraformation*. Stuttgart
- Reynès, P., 1879. *Monographie des Ammonites*. Paris and Marseille
- Sowerby, J., 1818. *Mineral Conchology* **2** : 203, pl. 190
- Sowerby, J. de C., 1824. *Mineral Conchology* **5** : 75, pl. 452
- Spath, L. F., 1923. *Quart. J. geol. Soc. Lond.* **79** : 66—90
- 1946. *Ann. Mag. nat. Hist.* (11) **12** : 490—496

10. Objection received from R. V. Melville (Geological Survey and Museum, London) : On 3rd August 1954 there was received in the Office of the Commission the following communication from Mr. R. V. Melville (*Geological Survey and Museum, London*) in which he expressed his objections to the proposal in the present case (Melville, 1954, *Bull. zool. Nomencl.* **9** : 348—349) :—

I have no claim to a specialist knowledge of ammonite-systematics, but from a general acquaintance with the group of ammonites in question, I feel that Dr. Spath's objections to the proposal that *Caenisites* be suppressed, carry more weight than the arguments put forward by Dr. Arkell and Dr. Donovan. I find it difficult to understand how these specialists can, in view of their reputation for scientific objectivity, question whether *Caenisites caeneus* belongs to the *turneri* group of ammonite species. The close relationship between *C. caeneus* and this group seems to me as obvious as any point of a taxonomic nature in fossils can be. The malformation of the holotype does not obscure the features which betray this relationship and upon which the generic assignation is based. At the most it might make specific determination difficult in the case of a specimen showing no overlap with the normal portion of the holotype ; though even this difficulty is diminished if Dr. Spath's view (that *C. caeneus* is a malformed variant of *Ammonites plotti* Reynès) is accepted.

I can see no danger to stability and uniformity of nomenclatorial usage in the perpetuation of the generic name *Caenisites*. An analogous case occurs in a group with which I am familiar. The echinoid genus *Hagenowia* Duncan, 1889 (*Journ. Linn. Soc.—Zool.* **23** : 210) has as type species (by monotypy) *Cardiaster rostratus* Forbes, 1852 (*Mem. geol. Surv.*, Decade IV : 1—4, pl. x, figs. 19—24). The holotype of this species is malformed in that the anterior rostrum which is the outstanding generic feature has been shortened by injury during life and has healed without regaining its original length. No difficulty has ever arisen in the interpretation of the genus or of the species, either taxonomically or nomenclatorially as a result of this malformation. The case of *Caenisites* seems to me closely similar and I support Dr. Spath's application for the official recognition of the name.

11. Submission to the Commission in April 1956 of a Report by the Secretary : In view of the relatively small number of comments received in regard to the present case and the differences of opinion disclosed by those which had been submitted, the Secretary decided at the close of the Prescribed Six-Month Waiting Period following publication in the *Bulletin of Zoological*

Nomenclature to postpone for a time the submission to the Commission of a Voting Paper in regard to the present case in the hope that thereby comments from other specialists might be received. When in the early part of 1956 it became evident that no further comments were to be expected, Mr. Hemming prepared for the consideration of the Commission the following Report on this case, to which he attached an Annexe in which he set out (i) the action which would require to be taken by the Commission if it were to decide in favour of the course recommended in the application submitted in this case (Alternative "A") and (ii) the positive action which would require to be taken in the event of the Commission deciding to reject the application submitted. Mr. Hemming's Report, which was completed on 8th April 1956, was as follows :—

The Arkell/Donovan proposal for the suppression of the generic name "Caenisites" Buckman, 1925 (Class Cephalopoda, Order Ammonoidea) and the Spath counter-proposal for the acceptance of that name

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

The purpose of the present note is to provide a summary of the arguments which have been advanced (a) in favour of the proposal submitted jointly by Dr. W. J. Arkell (*Sedgwick Museum, Cambridge University*) and Dr. D. T. Donovan (*Bristol University*) for the suppression under the Plenary Powers of the generic name *Caenisites* Buckman, 1925 (Class Cephalopoda, Order Ammonoidea) and (b) in favour of the counter-proposal submitted by Dr. L. F. Spath (*British Museum (Natural History)*) that the foregoing proposal should be rejected and that the above name should be placed on the *Official List of Generic Names in Zoology*.

2. A brief preliminary note on this case by Dr. Arkell was published in July 1953 (*Bull. zool. Nomencl.* 10 : 295—296) but owing to the preoccupation of this Office in the latter part of that year with matters arising out of the Copenhagen Congress, the actual application to the Commission by Dr. Arkell and Dr. Donovan was not published until February 1954 (*Bull. zool. Nomencl.* 6 : 364—366). At the same time Public Notice of the possible use of the Commission's Plenary Powers was given in the prescribed manner. In addition, such Notice was

given also to a number of general zoological serial publications and to certain palaeontological serials in Europe and America.

.

(NOTE: At this point there followed (a) a summary of the application received in the present case, (b) summaries of the five comments on that application which had already been published in the *Bulletin of Zoological Nomenclature*, namely, those received from Dr. Hölder and Dr. Haas, the first of the two communications received from Mr. Sylvester-Bradley and the comments received from Dr. Spath and Mr. Melville, and (c) the full text of the second communication received from Mr. Sylvester-Bradley, which latter had not been published in the *Bulletin*.)

In order to avoid unnecessary repetition, the foregoing passage in Mr. Hemming's paper is here omitted, as all the documents there referred to have been reproduced in full in paragraph 1 and in paragraphs 6 to 10 respectively in the present *Opinion*.)

.

3. As Secretary to the Commission I have held back the submission to the Commission of a Voting Paper in this case for some considerable time beyond the normal period, hoping that as a result other specialists might contribute to the discussion of the issues involved. When recently I reviewed this case, I came to the conclusion that nothing was to be hoped for from this source and therefore that the problem involved ought to be submitted to the Commission for decision without further delay. It appeared proper to me however, before doing so, to provide Dr. Arkell and Dr. Donovan with an opportunity for commenting upon the counter-proposal submitted by Dr. Spath and Mr. Sylvester-Bradley. Dr. Arkell had previously written saying:—"I have received a copy of comments on this [i.e. on *Caenisites*] by Sylvester-Bradley, but they do not move me from the position that a deformed specimen should not be accepted as type for a genus. Anyone thinking otherwise should be required to produce a second specimen that could be agreed to be an undeformed *Caenisites caeneus*. Donovan tried to do this but failed." In his reply to my recent inquiry Dr. Arkell expressed the view that Dr. Donovan had shown the type specimen of *Caenisites* to be a pathological monstrosity of doubtful generic identity and that in consequence he could not believe that anyone would insist on using it for an important genus, containing a zonal index species. Dr. Donovan, after re-affirming his belief that *Caenisites caeneus* Buckman and the *turneri*-group of species were not congeneric, proceeded as follows:—"The primary reason for regarding the name (*Caenisites*) as unsatisfactory is that any species, and therefore a

genus with such a type species, founded on a type which appears to be malformed, is unsatisfactory, for there is always liable to be disagreement as to (a) whether it is, in fact, a malformation and (b) if so, whether the fact should be 'allowed for' in interpreting the species. In my view one can only interpret a species by its type specimen, and not by what the type specimen might have been if it had not been malformed."

4. Before summarising the various conclusions which it might be possible to form in the light of the evidence submitted, I wish to place on record two points, neither of which was touched upon in the papers relating to this case. These are :—

- (1) Difficulties in the interpretation of a given nominal species arise in the majority of cases from the fact that the type specimen is no longer in existence and that it is necessary in consequence to rely upon the original description or figure provided by the original author. This is not the case in the present instance, the type specimen of the disputed nominal species *Caenisites caeneus* Buckman being preserved in the collection of the Geological Survey, London, where it bears the Registered Number G.S.M.47573. This specimen is known to have been examined by Arkell and Donovan, who take one view as to its interpretation and by Spath and Melville who take the opposite view.
- (2) Under a General Directive issued by the Fourteenth International Congress of Zoology, Copenhagen, 1953, the Commission is bound, when considering a proposal that it should place a given generic name on the *Official List of Generic Names in Zoology*, to ascertain whether that generic name has been taken as the base for a family-group name, in order that in suitable cases it may place that name on the *Official List of Family-Group Names in Zoology*. In the present case there is no family-group-name problem to be considered, for Dr. Donovan has informed me (*in litt.*, 26th March 1956) that neither the name *Caenisites* nor the name *Euasteroceras* has been taken as the basis for a family-group name, this genus or these genera being currently placed in the subfamily ASTEROCERATINAE Spath, 1946, of the family ARIETITIDAE Hyatt, 1874.

5. *Possible Courses of Action* : The present case is one of some delicacy, for, although the action asked for is purely nomenclatorial in character, many of the arguments which have been brought forward either in favour of the application submitted or in opposition to it depend for their validity upon taxonomic considerations, the determination of which lies outside the scope of the functions of the Commission. The considerations which are strictly nomenclatorial

in character and which might be regarded as relevant in the present case may be summarised as follows :—

- (a) The Commission might accept the view that it would be inappropriate that a nominal genus should have as its type species a nominal species whose type specimen is a pathological monstrosity. In the present case all the specialists concerned, though sharply divided on other matters, are agreed that the unique holotype of *Caenisites caeneus* Buckman, 1925, the type species of the genus *Caenisites* Buckman, 1925, is such a monstrosity. Accordingly, if the Commission were to take the foregoing view, its natural course would be to suppress the generic name *Caenisites* Buckman under its Plenary Powers.
- (b) The Commission might take the view that, having regard to the fact that leading specialists are unable to agree either as to the interpretation of the nominal species *Caenisites caeneus* Buckman or as to the generic affinities of the species so named, that nominal species is unsuitable to serve as the type species of a genus, to which, on one of the competing interpretations of *Caenisites caeneus* Buckman, would be referable the *turneri*-group of ammonite species, a group which is stated to be one of importance and to contain a zonal index fossil. If the Commission were to take the foregoing view, its natural course would be to suppress the generic name *Caenisites* Buckman, thus making way for the generic name *Euasteroceras* Donovan (type species : *Ammonites turneri* Sowerby (J. de C.), 1824), which it is agreed by both groups of specialists would then become the oldest such generic name for the *turneri* group of species.
- (c) The Commission will need also to consider carefully the quite different solution recommended by Dr. Spath, namely, that it should confine itself* to placing the generic name *Caenisites* Buckman and the specific name *caeneus* Buckman, as published in the combination *Caenisites caeneus*, on the appropriate *Official Lists* of valid names. In the actual form submitted Dr. Spath's proposal, unless supplemented in some appropriate fashion, would either (i) involve the acceptance by the Commission at least tacitly of the view that the genus *Caenisites* Buckman is the appropriate genus for *Ammonites turneri* Sowerby or (ii) would fail to deal with the portion of the original Arkell/Donovan proposal relating to the provision

* In Dr. Spath's original proposal (*Bull. zool. Nomencl.* 9 : 348) it was proposed also that the generic name *Euasteroceras* Donovan should be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*, but this proposal has since been withdrawn by Dr. Spath as inappropriate in view of the fact that the above name is an objectively available name and, on his interpretation of the taxonomic issues involved, is no more than a subjective junior synonym of *Caenisites* Buckman.

of a generic name for that species. The assumption noted in (i) above would lead the Commission outside its proper field by involving it in taking a view on a purely taxonomic matter, while the omission noted in (ii) above would offend against the canon that it is the duty of the Commission when considering any given nomenclatorial question to deal with all the issues so involved. These defects could however be overcome by the resort by the Commission to the procedure laid down by the Thirteenth International Congress of Zoology, Paris, 1948, under which in cases where there are differences of opinion among specialists as to the taxonomic content of a genus the name of which it is desired should be placed on the *Official List*, the Commission is instructed to place on the *Official List* both (or all) of the generic names concerned, at the same time adding to the entry relating to the later-published of the names concerned an endorsement that it is placed on the *List* for use by those specialists who hold the taxonomic view that the genus so named is taxonomically distinct from the genus having the older of the names concerned (see 1950, *Bull. zool. Nomencl.* 4: 268, Point (b)). If this procedure were to be adopted in the present case, the name *Euasteroceras* Donovan would be placed on the *Official List* at the same time that the name *Caenisites* Buckman was placed thereon, subject to the endorsement of the entry relating to the name *Euasteroceras* Donovan that it was placed on the *List* for use by specialists who held the taxonomic view that the species which are the respective type species of the above genera are not congeneric with one another. The proposal submitted by Dr. Spath, amplified in the foregoing manner and thus freed of any assumption on purely taxonomic matters, would be perfectly in order. So long however as the existing differences on taxonomic matters persist among specialists, such a solution would not ensure stability for the generic nomenclature for the species *Ammonites turneri* Sowerby.

6. It has been thought necessary to lay before the Commission the foregoing somewhat lengthy account of the history of this case owing to the fact that one of the documents to be considered was received so long after the close of the Prescribed Waiting Period that it was not practicable to arrange for its publication in the *Bulletin of Zoological Nomenclature*. In consequence an objective presentation of the views submitted by specialists could, in the view of this Office, be secured only if, when the document referred to above (i.e. the document reproduced in paragraph 2(c) above) was presented to the Commission, a much fuller account than would otherwise have been necessary were given of the views submitted by other specialists. Further, it was considered desirable to give the rather detailed analysis of the issues involved provided in paragraph 4 above in order to assist the Commission to isolate the purely nomenclatorial issues involved

from the purely taxonomic issues raised in a number of the documents submitted, these latter issues being of no concern to the Commission and lying outside its province.

7. In the light of the considerations outlined in the preceding paragraphs the International Commission is now invited to make an affirmative choice between the two opposing alternatives set out in the Annexe attached to the present paper. ALTERNATIVE "A" sets out a Ruling under which either for the reason set out in Section (a) of paragraph 5 above or for that set out in Section (b) of the same paragraph the Commission would use its Plenary Powers to suppress the generic name *Caenisites* Buckman for the purpose of providing an assured generic name for the species named *Ammonites turneri* Sowerby. The action set out in this Alternative is that recommended by Dr. Arkell and Dr. Donovan in their original application. ALTERNATIVE "B" sets out a Ruling under which the Commission would confine itself to placing on the *Official List* both the generic names involved in this case (*Caenisites* and *Euasteroceras*), an endorsement being made to the entry relating to the later-published of the above names (*Euasteroceras*) that it is placed on the *Official List* for use by specialists who on taxonomic grounds, consider the genus so named to be distinct from *Caenisites* Buckman. The action set out in this Alternative is that proposed by Dr. Spath after that proposal has been purged of any possible taxonomic implications by being brought, as explained in Section (c) of paragraph 5 of the present paper, into harmony with the procedure prescribed by the Paris Congress for adoption in cases where it is proposed that a given generic name should be placed on the *Official List* but where there are differences of opinion among specialists as to the taxonomic scope of the genus concerned.

ANNEXE

Alternative Rulings submitted for the consideration of the International Commission on Zoological Nomenclature

Part 1 : ALTERNATIVE "A"

(suppression of the generic name " *Caenisites* ")

(The Arkell/Donovan proposal)

(1) Under the Plenary Powers the generic name *Caenisites* Buckman, 1925 (Class Cephalopoda, Order Ammonoidea), is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology* :—*Euasteroceras* Donovan, 1953 (gender : neuter) (type species, by original designation : *Ammonites turneri* Sowerby (J. de C.), 1824).

(3) The under-mentioned specific name is hereby placed on the *Official List of Specific Names in Zoology*:—*turneri* Sowerby (J. de C.), 1824, as published in the combination *Ammonites turneri* (specific name of type species of *Euasteroceras* Donovan, 1953).

(4) The generic name *Caenisites* Buckman, 1925, as suppressed under the Plenary Powers under (1) above, is hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*.

Part 2 : ALTERNATIVE " B "

(Refusal to suppress the generic name " *Caenisites* ")

(The *Spath* proposal amplified as explained in Section (c) of paragraph 5 of the present paper

(1) The request for the suppression under the Plenary Powers of the generic name *Caenisites* Buckman, 1925 (Class Cephalopoda, Order Ammonoidea) is hereby refused.

(2) The under-mentioned generic names are hereby placed on the *Official List of Generic Names in Zoology*:—

(a) *Caenisites* Buckman, 1925 (gender : masculine) (type species, by monotypy : *Ammonites caeneus* Buckman, 1925) ;

(b) *Euasteroceras* Donovan, 1953 (gender : neuter) (type species, by original designation : *Ammonites turneri* Sowerby (J. de C.), 1824) (the entry so made to be subject to the endorsement that the name *Euasteroceras* Donovan is placed on the *List* for use by those specialists who consider on taxonomic grounds that the type species of the genus so named is generically distinct from the type species of the genus *Caenisites* Buckman, 1925).

(3) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology*:—

(a) *caeneus* Buckman, 1925, as published in the combination *Caenisites caeneus* (specific name of type species of *Caenisites* Buckman, 1925) ;

- (b) *turneri* Sowerby (J. de C.), 1824, as published in the combination *Ammonites turneri* (specific name of type species of *Euasteroceras* Donovan, 1953).

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

12. Issue of Voting Paper V.P.(56)18 : On 25th April 1956 a Voting Paper (V.P.(56)18) was issued in which the Members of the Commission were invited to vote for either "Alternative 'A' (suppression of the generic name *Caenisites*) as set out in Part 1 of the Annexe to the paper submitted by the Secretary simultaneously with the present Voting Paper" [i.e. as set out in the Part numbered as above in the Annexe to the paper reproduced in paragraph 11 above] or "Alternative 'B' (refusal to suppress the generic name *Caenisites*) as set out in Part 2 of the Annexe to the paper referred to above".

13. The Prescribed Voting Period : As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 25th July 1957.

14. Particulars of the Voting on Voting Paper V.P.(56)18 : At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(56)18 was as follows :—

- (a) *Votes in favour of "Alternative 'A'" has been given by the following twelve (12) Commissioners (arranged in the order in which Votes were received) :*

Holthuis ; Boschma ; Hering ; Bodenheimer ; Prantl ; Hankó ; Dymond ; Jaczewski ; Bonnet ; Mertens ; Tortonese ; Hemming ;

(b) *Votes in favour of "Alternative 'B'" had been given by the following twelve (12) Commissioners (arranged in the order in which Votes were received) :*

Vokes ; Esaki ; do Amaral ; Lemche ; Key ; Mayr ;
Riley ; Cabrera ; Stoll ; Sylvester-Bradley ; Kühnelt ;
Miller ;

(c) *On Leave of Absence, one (1) :*

Bradley (J.C.) ;

(d) *Voting Papers not returned :*

None.

15. Declaration of Result of Vote : In view of the fact that as shown in paragraph 14 above, the votes on Voting Paper V.P.(56)18 were equally divided, Mr. Hemming took the view at the close of the Prescribed Voting Period that it was desirable to postpone the declaration of the vote taken on the foregoing Voting Paper until a decision had been taken by the Commission on certain matters relating to the procedure to be followed in dealing with applications involving the possible use of the Commission's Plenary Powers, it being possible that the decision to be taken by the Commission in this matter might affect the procedure to be followed in the present case. The question of procedure referred to above was dealt with later by the Commission on Voting Paper V.P.(O.M.)(57)3, the vote on which was completed

on 29th April 1957. The decision so taken was embodied in *Declaration* 34 (now in the press³) on 21st May 1957. In that *Declaration*, however, the Commission dealt only with the procedure to be followed when an application for the use of the Plenary Powers received a majority of the votes cast but failed to secure two out of every three votes cast. Thus the procedure to be followed when such an application received only a minority of the votes cast or where, as in the present case, the votes cast in favour of such a proposal and those cast against it were equal in number was not affected by the foregoing *Declaration*, the normal procedure remaining applicable to such cases. The adoption of the above *Declaration* cleared the ground for the declaration of the vote taken on Voting Paper V.P.(56)18 in relation to the proposal for the suppression under the Plenary Powers of the generic name *Caenisites* Buckman, 1925. Accordingly on 30th April 1957 (the day following the adoption of *Declaration* 34), Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on the above Voting Paper, signed a Certificate that the votes cast were as set out in paragraph 14 above and declaring as follows the result of the vote so taken, namely (a) that the application for the suppression of the generic name *Caenisites* Buckman under the Plenary Powers, as set out under the title "Alternative 'A'" in Part 1 of the Annexe to the paper submitted by the Secretary concurrently with the above Voting Paper [i.e. in Part 1 of the Annexe to the paper reproduced in paragraph 11 of the present *Opinion*], having not secured two out of every three votes cast on the above Voting Paper, had failed to obtain the approval of the Commission, (b) that, as in the vote so taken the above proposal had not even obtained an absolute majority of the votes cast, the provisions of *Declaration* 34 were not applicable in the present case, and consequently (c) that the proposal as set out under the title "Alternative 'B'" in Part 2 of the Annexe to the paper referred to above, namely, the proposal for the rejection of the proposal submitted under the title "Alternative 'A'" in Part 1 of the said Annexe, had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

³ The *Declaration* here referred to was published on 3rd September, 1957. (Part 2 of the present volume.)

16. Preparation of the Ruling given in the present "Opinion" :

On 5th June 1957, Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(56)18.

17. Original References : The following are the original references for the names placed on *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion* :—

caeneus, *Caenisites* Buckman, 1925, *Type Ammonites* 5 : pl. DLXXII

Caenisites Buckman, 1925, *Type Ammonites* 5 : pl. DLXXII

Euasteroceras Donovan, 1953, *Proc. geol. Soc. Lond.* No. 1503 : xiii—xiv

turneri, *Ammonites*, Sowerby (J. de C.), 1824, *Min. Conch.* 5 : 75, pl. 452

18. Family-Group-Name Problems : The Office of the Commission has been informed by Dr. Donovan (one of the applicants in the present case) (Donovan, *in litt.*, 26th March 1956) that neither of the generic names dealt with in the present *Opinion* has been taken as the base for a family-group name.

19. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

20. The present *Opinion* shall be known as *Opinion* Four Hundred and Eighty-Two (482) of the International Commission on Zoological Nomenclature.

DONE in London, this Fifth day of June, Nineteen Hundred and Fifty-Seven.

*Secretary to the International Commission
on Zoological Nomenclature*

FRANCIS HEMMING